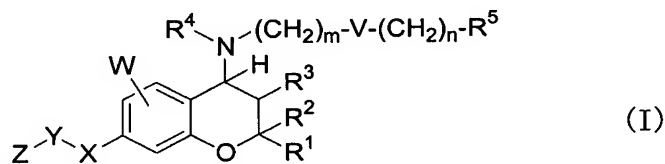


Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A benzopyran compound of formula (I)



or a pharmaceutically acceptable salt thereof.

wherein

X is NR⁶ wherein R⁶ is hydrogen atom or C₁₋₄ alkyl group;

Y is a bond, SO or SO₂;

Z is C₁₋₄ alkyl group (wherein the C₁₋₄ alkyl group may be arbitrarily substituted with 1 to 5 halogen atoms or phenyl group (wherein the phenyl group may be arbitrarily substituted with C₁₋₄ alkyl group)) or phenyl group (wherein the phenyl group may be arbitrarily substituted with C₁₋₄ alkyl group);

W is hydrogen atom, hydroxy group, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), halogen atom, C₁₋₄ alkyl group or C₁₋₆ alkylsulfonylamino group;

R¹ and R² are independently of each other C₁₋₃ alkyl group (wherein the C₁₋₃ alkyl group may be arbitrarily substituted with hydroxy group, methoxy group, halogen atom or trifluoromethoxy group);

R³ is hydrogen atom, hydroxy group or methoxy group;

m is an integer of 0 to 4;

n is an integer of 0 to 4;

V is a single bond, CR^7R^8 wherein R^7 is

- C_{1-6} alkyl group (wherein the C_{1-6} alkyl group may be arbitrarily substituted with halogen atom, hydroxy group, C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom), C_{6-14} aryl group or C_{2-9} heteroaryl group (wherein each of the C_{6-14} aryl group or C_{2-9} heteroaryl group may be arbitrarily substituted with 1 to 3 R^{10} wherein R^{10} is halogen atom; hydroxy group; C_{1-6} alkyl group (wherein the C_{1-6} alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom))); C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C_{1-6} alkylamino group; di- C_{1-6} alkylamino group; C_{1-6} alkylcarbonylamino group; C_{1-6} alkylsulfonylamino group; aminocarbonyl group; C_{1-6} alkylaminocarbonyl group; di- C_{1-6} alkylaminocarbonyl group; C_{1-6} alkylcarbonyl group; C_{1-6} alkoxycarbonyl group; aminosulfonyl group; C_{1-6} alkylsulfonyl group; carboxy group or C_{6-14} arylcarbonyl group, and when a plurality of R^{10} are present, they may be identical or different from each other),
 - C_{6-14} aryl group or C_{2-9} heteroaryl group (wherein each of the C_{6-14} aryl group or C_{2-9} heteroaryl group may be arbitrarily substituted with 1 to 3 R^{10} wherein R^{10} has the above-mentioned meaning));

- hydroxy group or

- C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom), and R^8 is

- hydrogen atom,

- C_{1-6} alkyl group (wherein the C_{1-6} alkyl group may be arbitrarily substituted with halogen atom, hydroxy group, C_{1-6} alkoxy group (wherein the C_{1-6} alkoxy group may be arbitrarily substituted with halogen atom)),

- C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group (wherein each of the C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group may be arbitrarily substituted with 1 to 3 R¹¹ wherein R¹¹ is halogen atom; hydroxy group; C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom)); C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino group; C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group; aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group; di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group; C₁₋₆ alkoxycarbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl group; carboxy group or C₆₋₁₄ arylcarbonyl group, and when a plurality of R¹¹ are present, they may be identical or different from each other),

- hydroxy group or

- C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), or R⁷ together with R⁸ may represent O or S, or

V is NR⁹ wherein R⁹ is hydrogen or C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), hydroxy group, C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group (wherein each of the C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group may be arbitrarily substituted with 1 to 3 R¹¹ wherein R¹¹ has the above-mentioned meaning)); or O, S, SO or SO₂;

R⁴ is hydrogen or C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), or hydroxy group); and

R⁵ is

- hydrogen atom,
- C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), amino group, carboxy group or hydroxy group),
- C₃₋₈ cycloalkyl group or C₃₋₈ cycloalkenyl group (wherein the C₃₋₈ cycloalkyl group or C₃₋₈ cycloalkenyl group may be arbitrarily substituted with halogen atom, C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), amino group, carboxy group or hydroxy group), C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom), amino, carboxy group or hydroxy group), or
- C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group (wherein each of the C₆₋₁₄ aryl group or C₂₋₉ heteroaryl group may be arbitrarily substituted with 1 to 3 R¹² wherein R¹² is halogen atom; hydroxy group; C₁₋₆ alkyl group (wherein the C₁₋₆ alkyl group may be arbitrarily substituted with halogen atom, hydroxy group or C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom)); C₁₋₆ alkoxy group (wherein the C₁₋₆ alkoxy group may be arbitrarily substituted with halogen atom); nitro group; cyano group; formyl group; formamide group; sulfonylamino group; sulfonyl group; amino group; C₁₋₆ alkylamino group; di-C₁₋₆ alkylamino group; C₁₋₆ alkylcarbonylamino group; C₁₋₆ alkylsulfonylamino group; aminocarbonyl group; C₁₋₆ alkylaminocarbonyl group; di-C₁₋₆ alkylaminocarbonyl group; C₁₋₆ alkylcarbonyl group; C₁₋₆ alkoxycarbonyl group; aminosulfonyl group; C₁₋₆ alkylsulfonyl group; carboxy group, C₆₋₁₄ arylcarbonyl group, ureido group, C₁₋₆ alkylureilene group, C₆₋₁₄ aryl C₁₋₆ alkylamino group, C₁₋₆ alkoxycarbonylamino group, C₆₋₁₄ aryloxy group or C₆₋₁₄ arylcarbonylamino group, when a plurality of R¹² are present, they may be identical or different from each other).

2. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R^1 and R^2 are methyl group, R^3 is hydroxy group, and V is a single bond.

3. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R^1 and R^2 are methyl group, R^3 is hydroxy group, and V is CR^7R^8 .

4. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein both R^1 and R^2 are methyl group, R^3 is hydroxy group, and V is NR^9 .

5. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 2, wherein R^5 is C_{1-6} alkyl group, C_{3-8} cycloalkyl group or C_{6-14} aryl group.

6. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 3, wherein R^5 is C_{1-6} alkyl group, C_{3-8} cycloalkyl group or C_{6-14} aryl group.

7. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 4, wherein R^5 is C_{1-6} alkyl group, C_{3-8} cycloalkyl group or C_{6-14} aryl group.

8. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 5, wherein W is hydrogen atom, hydroxy group, methoxy group, chlorine atom, bromine atom, methyl group, ethyl group or methylsulfonylamino group.

9. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 6, wherein W is hydrogen atom, hydroxy group,

methoxy group, chlorine atom, bromine atom, methyl group, ethyl group or methylsulfonylamino group.

10. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 8, wherein R⁵ is C₁₋₆ alkyl group or C₆₋₁₄ aryl group, R⁶ is hydrogen atom or methyl group, Y is SO₂, and Z is C₁₋₄ alkyl group.

11. (Currently Amended) The benzopyran compound or a pharmaceutically acceptable salt thereof according to claim 8, wherein R⁵ is C₁₋₆ alkyl group or C₆₋₁₄ aryl, R⁶ is hydrogen atom or methyl group, Y is a bond, and Z is C₁₋₄ alkyl group.

12. (Currently Amended) A benzopyran compound which is N-{(3R*, 4S*)-3-hydroxy-6-methoxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}-methanesulfonamide or a pharmaceutically acceptable salt thereof.

13. (Currently Amended) A benzopyran compound which is N-{(3R*, 4S*)-3,6-dihydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}methanesulfonamide or a pharmaceutically acceptable salt thereof.

14. (Currently Amended) A benzopyran compound which is N-{(3R*, 4S*)-3-hydroxy-6-methoxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}-N-methylmethanesulfonamide or a pharmaceutically acceptable salt thereof.

15. (Currently Amended) A benzopyran compound which is N-{(3R*, 4S*)-4-[(2-cyclohexylethyl)amino]-3-hydroxy-6-methoxy-2,2-dimethyl-3,4-dihydro-2H-1-benzopyran-7-yl}methanesulfonamide or a pharmaceutically acceptable salt thereof.

16. (Currently Amended) A benzopyran compound which is N-{(3R*, 4S*)-3-hydroxy-6-methoxy-2,2-dimethyl-4-(pentylamino)-3,4-dihydro-2H-1-benzopyran-7-yl}methanesulfonamide or a pharmaceutically acceptable salt thereof.

17. (Currently Amended) A benzopyran compound which N-{(3R*, 4S*)-3-hydroxy-2,2,8-trimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-1-benzopyran-7-yl}

methanesulfonamide or a pharmaceutically acceptable salt thereof.

18. (Currently Amended) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl} methanesulfonamide ~~maleate~~ or a pharmaceutically acceptable salt thereof.

19. (Currently Amended) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl} ethanesulfonamide or a pharmaceutically acceptable salt thereof.

20. (Currently Amended) A benzopyran compound which is 1,1,1-trifluoro-N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}- methanesulfonamide or a pharmaceutically acceptable salt thereof.

21. (Currently Amended) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-N-methylmethanesulfonamide or a pharmaceutically acceptable salt thereof.

22. (Currently Amended) A benzopyran compound which is N- $\{(3R^*, 4S^*)$ -6-bromo-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-methanesulfonamide or a pharmaceutically acceptable salt thereof.

23. (Currently Amended) A benzopyran compound which is $(3R^*, 4S^*)$ -2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chroman-3-ol or a pharmaceutically acceptable salt thereof.

24. (Currently Amended) A benzopyran compound which is $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chroman-3-ol or a pharmaceutically acceptable salt thereof.

25. (Currently Amended) A benzopyran compound which is $(3R^*, 4S^*)$ -4- $\{[2-(4-fluorophenyl)ethyl]amino\}$ -2,2-dimethyl-7-dimethylamino-3-chroman-3-ol or a pharmaceutically acceptable salt thereof.

26. (Currently Amended) A benzopyran compound which is (3*R**, 4*S**)-6-methoxy-2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

27. (Currently Amended) A benzopyran compound which is (3*R**, 4*S**)-6-methoxy-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

28. (Currently Amended) A benzopyran compound which is N-{(3*R**, 4*S**)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-4-methylbenzenesulfonamide or a pharmaceutically acceptable salt thereof.

29. (Currently Amended) A benzopyran compound which is N-{(3*R**, 4*S**)-3-hydroxy-2,2-dimethyl-6-[(methylsulfonyl)amino]-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-methanesulfonamide or a pharmaceutically acceptable salt thereof.

30. (Currently Amended) A benzopyran compound which is (3*R**, 4*S**)-2,2-dimethyl-7-methylethylamino-4-[(2-phenylethyl)amino]-3-chromanol or a pharmaceutically acceptable salt thereof.

31. (Currently Amended) A benzopyran compound which is N-{(3*R**, 4*S**)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-chromen-7-yl}-N-isopropylmethanesulfonamide or a pharmaceutically acceptable salt thereof.

32. (Currently Amended) A pharmaceutical ~~characterized by~~ comprising the benzopyran compound ~~according to~~ of claim 1 or pharmaceutically acceptable salt thereof as an active ingredient, and a pharmaceutically acceptable excipient.

33. (Currently Amended) A pharmaceutical for treating arrhythmia ~~characterized by~~ comprising the benzopyran compound ~~according to~~ of claim 1 or pharmaceutically acceptable salt thereof as an active ingredient, and a pharmaceutically acceptable excipient.

34. (New) The benzopyran compound of claim 18, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl} methanesulfonamide maleate.

35. (New) The benzopyran compound of claim 19, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl} ethanesulfonamide hydrochloride.

36. (New) The benzopyran compound of claim 20, wherein the pharmaceutically acceptable salt is 1,1,1-trifluoro-N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-methanesulfonamide maleate.

37. (New) The benzopyran compound of claim 21, wherein the pharmaceutically acceptable salt is N- $\{(3R^*, 4S^*)$ -3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-benzopyran-7-yl}-N-methylmethanesulfonamide hydrochloride.

38. (New) The benzopyran compound of claim 23, wherein the pharmaceutically acceptable salt is $(3R^*, 4S^*)$ -2,2-dimethyl-7-dimethylamino-4-[(2-phenylethyl)amino]-3-chroman-3-ol hydrochloride.

39. (New) The benzopyran compound of claim 24, wherein the pharmaceutically acceptable salt is $(3R^*, 4S^*)$ -2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chroman-3-ol hydrochloride.

40. (New) The benzopyran compound of claim 25, wherein the pharmaceutically acceptable salt is $(3R^*, 4S^*)$ -4- $\{[2-(4\text{-fluorophenyl})\text{ethyl}]\text{amino}\}$ -2,2-dimethyl-7-dimethylamino-3-chroman-3-ol hydrochloride.

41. (New) The benzopyran compound of claim 27, wherein the pharmaceutically acceptable salt is $(3R^*, 4S^*)$ -6-methoxy-2,2-dimethyl-7-methylamino-4-[(2-phenylethyl)amino]-3-chroman-3-ol hydrochloride.

42. (New) The benzopyran compound of claim 30, wherein the pharmaceutically acceptable salt is (3*R**, 4*S**)-2,2-dimethyl-7-methylethylamino-4-[(2-phenylethyl)amino]-3-chromanol hydrochloride.

43. (New) The benzopyran compound of claim 31, wherein the pharmaceutically acceptable salt is (N- {(3*R**, 4*S**)-3-hydroxy-2,2-dimethyl-4-[(2-phenylethyl)amino]-3,4-dihydro-2H-chromen-7-yl}-N-isopropylmethanesulfonamid hydrochloride.